

**ATTACHMENT TO  
SPECIAL PROVISIONS SP-1**

**ATTACHMENT “A”**

**ABBREVIATED SCOPE OF WORK  
AND  
RESPONSIBILITIES BETWEEN THE  
CITY AND THE CORE SYSTEMS  
CONTRACTOR**

# Honolulu High-Capacity Transit Corridor Project

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## ATTACHMENT “A”

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### A1.0 SCOPE OF WORK

The Core Systems Contractor (CSC) shall provide design-build, operate and maintain services for the Honolulu High-Capacity Transit Corridor Project (HHCTCP). The HHCTCP Core Systems and Passenger Vehicles elements are to be manufactured, delivered, and installed to meet the specific needs of each Project segment. A single DBOM Contract is planned to provide vehicles, fare vending, train control, communications, traction electrification, and operations and maintenance from the initial operating segment and for at least ten (10) years following the full operation of the System (as described in paragraph g) below).. The Scope of Work for the Core Systems Contractor will include, but not be limited to, the following:

a) The Core Systems Contractor will be responsible for adherence to the Design Criteria and specifications as provided in the RFP Part 2, which include guidelines of the City. In general, the Work includes PM/CM, Interface Management, Public Relations, Environmental Compliance, Safety and Quality Management (QA/QC) related to the Core Systems and Passenger Vehicles, but not limited to:

- Providing a comprehensive quality plan and conduct and document all design, construction, operations and maintenance quality control for the Core Systems project elements;
- Obtaining all required and necessary construction permits, environmental permits, and all other assigned permits;
- Complying with all applicable laws and regulations, in particular, the HAR, HRS, and FTA requirements;
- Planning and executing all environmental commitments / mitigation assigned;
- Supporting HHCTCP Public Involvement Team, including responding to inquiries, public meetings, and public outreach programs;
- Identifying and mitigating any unanticipated circumstances such as historical or archeological resources, or hazardous materials that may be encountered, in accordance with requirements of the Contract; and
- Maintaining a safe Core Systems Project and use good housekeeping standards.

b) Design, manufacture, deliver, test and commission sufficient light metro vehicles to meet an initial capacity of 7200 pphpd. Provide all bench test equipment, special tools, initial provisions, and manuals to maintain the **Passenger Vehicles**. Provide all parts and labor to satisfactorily maintain the vehicles during construction and operation of the various operating segments of the System and for at least 10-years following the completion of the Project. Coordinate, collaborate and integrate with the MSF Design-Builder, who is responsible for the shop design and its heavy equipment to assure compatibility with the vehicles and with maintenance procedures and protocols. Close coordination is required with the MSF Design-Builder for potential vehicle assembly.

c) Design, manufacture, install, test and commission approximately 20.2 miles of double track, fully automatic bi-directional train control system, including all interlocking controls, wayside indications, and dedicated train control communications network. Provide all specialized test equipment, including those necessary to validate, maintain, update and troubleshoot vital and non-vital software, and manuals needed to maintain the **Train Control System**. Provide all necessary parts and labor to maintain the Train Control System during construction and operation of the operating segments of the System pursuant to the terms specified in the Special, Technical and Management Provisions herein. Provide, install, text maintain, and update all workstation hardware, network and network interfaces, software, communications and back-up equipment, and training required to support the Operations Control Center (OCC) as described in the Technical Provisions Section 27 90 00 herein.

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d) Design, manufacture, install, test and commission the traction electrification equipment and cabling necessary for approximately 20.2 miles of double track mainline, the MSF and all mainline auxiliary tracks. Provide all safety related appliances and software to monitor and control the **Traction Electrification System**. Provide all connections to the power contact rail and running rails provided and installed by others. Provide all specialized test equipment, initial provisions, and manuals necessary to maintain the Traction Electrification System. Provide all necessary parts and labor to maintain the Traction Electrification System during construction and operation of the System pursuant to the terms of this contract as specified in the special, Technical and Management Provisions herein.

e) Design, manufacture, install, test and commission the **Communications System** for the Project, including:

- 1) Communication Transmission System (CTS); Optical network node, network switching and wide area network over the entire Project;
- 2) Fiber Optic Cabling Network (FOCN); Fiber optic cable and devices, and wayside splice cases;
- 3) Supervisory Control and Data Acquisition (SCADA); OCC operations and monitoring of Train Control, Traction Electrification, Security and Alarms, monitor elevator and escalator performance, and fare vending alarms;
- 4) Telephone System; Administrative, Emergency (Blue Light) and voice recording and logging;
- 5) Video System; Stations, MSF, on-board Vehicles, OCC monitors, and logging and storage equipment;
- 6) Passenger Information; Station Message Signs and variable message signs;
- 7) Intrusion and Detection; Wayside intrusion and detection at stations, substations, gap breaker stations and the MSF;
- 8) Fire Detection; Wayside fire detection and alarms at stations, substations, gap breaker stations and the MSF;
- 9) Local Area Network; and
- 10) Wireless Communications for WiFi networks for operations and maintenance.

Provide all specialized test equipment, initial provisions and manuals necessary to maintain the Communications System. Provide all necessary parts and labor to maintain the Communications System during construction and operation of the various operating segments of the System pursuant to the Special, Technical and Management Provisions herein. Coordinate, collaborate and integrate with the MSF Design-Builder, Guideway designers and constructors, Station designers and constructors.

f) Design, manufacture, install, test and commission the Fare Vending System for the Project. Provide all bench test equipment, special tools, initial provisions, and manuals to maintain the **Fare Vending System**. Provide all parts and labor to satisfactorily maintain the Fare Vending System during construction and operation of the various operating segments of the System pursuant to the terms of this contract as specified in the Special, Technical and Management Provisions herein. Fare collections will be provided by the City or by a City-Contractor to be procured separately. Connection of the Fare Vending System to the communication network and related software to receive/manage data and alarms originating from and directed to the fare equipment shall be the responsibility of the Core Systems Contractor. Coordinate, collaborate and integrate with the City as it relates to the fare collection and revenue tracking / reporting subsystems.

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g) The Core Systems Contractor shall be responsible for operations and maintenance of the light metro rail system from the initial operating segment and for at least 10-years following the full operation. The **Operations and Maintenance** portion of the Work after full operation will be evaluated based on O&M performance at the end of 5-years. The Contract may be terminated at this point if the performance is deemed to be unsatisfactory without any further obligations to the City. O&M will include but not be limited to all administrators, supervisors, technicians, skilled and non-skilled staff, central operations controllers, vehicle attendants and janitorial services required to operate and maintain the light metro rail system. Inspection, maintenance and repair of the guideway and station infrastructure other than janitorial service described in the Technical Provisions will be provided by the City or a City-contractor to be procured separately. Close coordination and management of the two-party O&M teams is required for smooth and effective service.

h) The Core Systems Contractor shall provide overall integration and coordination of all aspects of the Core Systems Contract for the HHCTCP Project. The CSC will have a primary lead role with the Interface Management (IM) Team that will consist of City facilitator, MSF Interface Manager, Guideway Interface Managers (for both design and construction), and Station Interface Managers (for both design and construction) as well as other members to be determined later. The IM Team will have regular scheduled meetings and action plans to provide integration, collaboration and coordination with all Project stakeholders, the city, and other agencies as required.

i) The MSF is anticipated to be complete in mid-2014 and turned over to the Core Systems Contractor for commencement of O&M services as well as potential use for Vehicle assembly.

### **A2.0 RESPONSIBILITY OF THE CORE SYSTEMS CONTRACTOR**

The Design-Build Operate and Maintain Contractor (also referred to CSC) shall be responsible for:

- a) Final design, construction, procurement and/or installation of all Project components;
- b) Coordination with Project stakeholders, other designers and contractors;
- c) Design, construction, operation and maintenance quality control and quality assurance;
- d) Design and construction management;
- e) Operations and Maintenance management and administration;
- f) Public information support to the City;
- g) Maintenance of traffic and access to properties;
- h) Project safety and security;
- i) ROW acquisition support;
- j) Acquisition of construction easements;
- k) Specified and/or required permits not furnished by the City;
- l) Compliance with applicable laws, ordinances, rules and regulations;
- m) Environmental compliance and mitigation;
- n) Interface management and systems integration;
- o) Insurance not covered by the Owner Controlled Insurance Program;
- p) As-built drawings and documents; Records management system;
- q) Temporary facilities (offices, work and layout areas, etc.); and

- r) Specified facilities and equipment for use by the City

#### **A3.0 RESPONSIBILITY OF CITY**

City agrees to do the following:

- a) Designate in writing a person to act as representative of the City with respect to the services to be rendered under this Contract. Such person shall have complete authority to transmit instructions, receive information, interpret and define City's policies, make decisions with respect to performance of the Work, and shall provide such other services as may be agreed upon;
- b) Make payments to Core Systems Contractor promptly when they are due and Core Systems Contractor provides acceptable documentation per the Contract;
- c) Furnish the Site, Right-of-Way, Environmental Permits, and City-supplied material as set forth in the Contract;
- d) Provide Review and Comment on Core Systems Contractor work products as defined in the Contract;
- e) Provide information known to or in the possession of City relating to the presence of materials and substances at the Site which could create a Hazardous Materials condition; and
- f) Provide Quality Oversight as defined in the Contract.

#### **A4.0 LIMITATIONS ON CITY'S RESPONSIBILITIES**

Limitations on City's responsibilities include:

- a) City will not design the Work, nor supervise, direct, or have control or authority over, nor be responsible for, Core Systems Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Core Systems Contractor to comply with Laws or Regulations applicable to the furnishing or performance of the Work. Instead such actions are the responsibility of the Core Systems Contractor;
- b) City will not provide day-to-day planning or managing of the Core Systems operation and maintenance responsibilities defined in the Contract; and
- c) City is not responsible for Core Systems Contractor's failure to perform the Work in accordance with the Contract Documents.